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basic imagery interpretation report

Kuybyshev Experimental Aircraft and Rocket Engine Plant Krasnaya Glinka 2, USSR (TSR)

Strategic Weapons Industrial Facilities

USSR

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RCA-09/0028/79
DECEMBER 1979
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INSTALLATION OR ACTIVITY NAME					COUNTRY
Kuybyshev Experimental Aircraft and Rocket Engine Plant Krasnaya Glinka 2					UR
UTM COORDINATES	GEOGRAPHIC COORDINATES	CATEGORY	BE NO.	COMIREX NO.	NIETB NO.
NA	53-20-53N 050-12-31E				
MAP REFERENCE					
DMAC. USATC, Series 200, Sheet 0165-17, scale 1:200,000					
LATEST IMAGERY USED			NEGATION DATE (If required)		
			NA		

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ABSTRACT

1. (TSR) This report updates three previous NPIC reports, [redacted] on Kuybyshev Experimental Aircraft and Rocket Engine Plant Krasnaya Glinka 2, USSR, and satisfies the basic reporting requirement for this target. Activity observed at the plant since [redacted] the information cutoff date for the most recent report, is discussed in this report.

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2. (TSR) Construction activity at the plant during the reporting period, [redacted] resulted in a net increase of 10,972 square meters of floorspace. The plant was enlarged by 6.5 hectares. As of [redacted] the date of the latest imagery used in this report, the plant contained 152,063 square meters of floorspace with an additional 1,664 square meters under construction. This report describes construction and production activity at Krasnaya Glinka 2 and includes a location map, an annotated photograph, and a table of mensural data pertaining to new construction activity.

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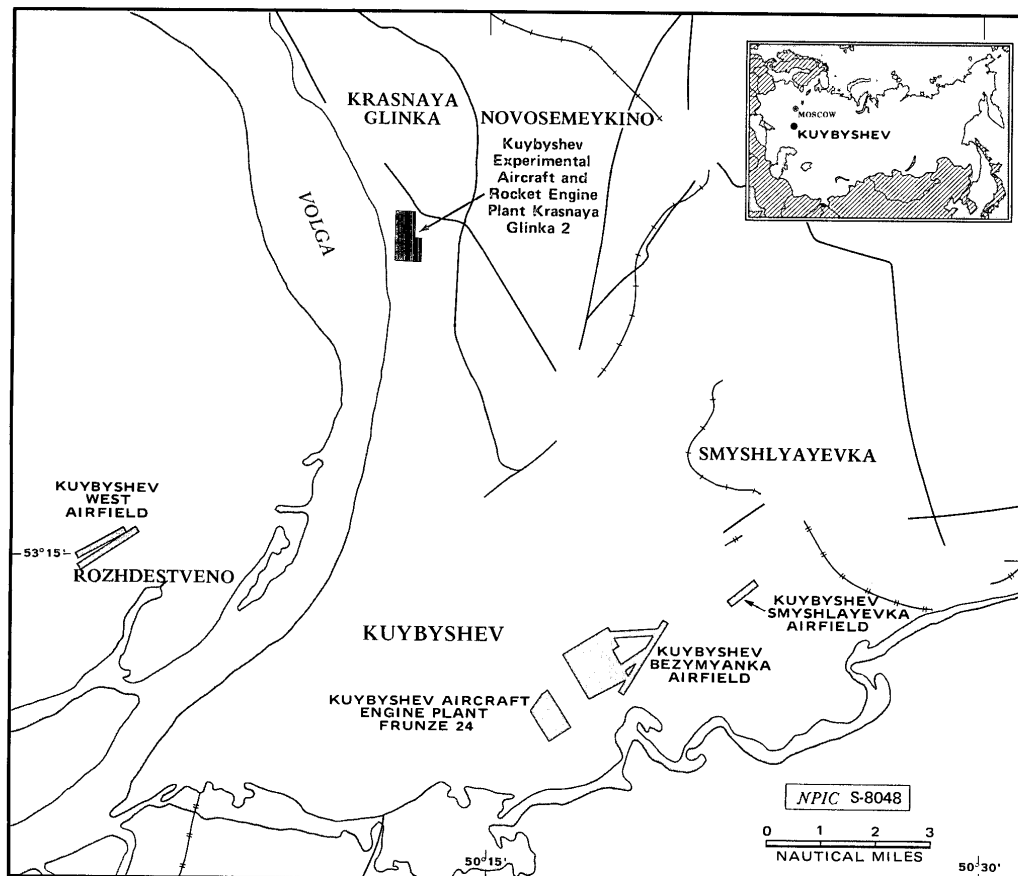


FIGURE 1. LOCATION OF KUYBYSHEV EXPERIMENTAL AIRCRAFT AND ROCKET ENGINE PLANT KRASNAYA GLINKA 2, USSR

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BASIC DESCRIPTION**Construction Activity**

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3. (TSR) This report updates three previous NPIC reports.¹⁻³ Construction activity observed at Kuybyshev Experimental Aircraft and Rocket Engine Plant Krasnaya Glinka 2 (Figure 1) between [] resulted in a net increase of approximately 7,335 square meters of floorspace (Figure 2 and Table 1). Approximately 9,636 square meters of floorspace had been added and 2,301 square meters had been razed. Significant buildings constructed during this period consisted of an administration building (item 63), a water filtration building (item 61), a vehicle storage building (item 58), and four storage buildings (items 57, 64, 67, and 68). Other construction activity consisted of the modification of an engine test building (item 43) the addition of an administration/engineering section (item 29b) to a shop building (item 29), and the enlargement of the administration/engineering building (item 30a). The older section of this building (item 30) was undergoing refurbishment by the end of 1974. A shop building (item 26) with floorspace of 2,301 square meters was razed.

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4. (TSR) Modification of the engine test building (item 43) consisted of the replacement of two cylindrical exhaust stacks with two exhaust silencer/diffuser systems (items 43a and b). Each system consists of a pair of vertical exhaust towers, a 5-meter-diameter diffuser tube, and an exhaust port. Each exhaust port added 67 square meters of usable floorspace to the building. Each exhaust tower was [] at the top and 25 meters in height. Similar modification has been observed at six other engine research/production facilities in the Soviet Union.⁴

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5. (TSR) Of 5,430 square meters of floorspace added during this period at Krasnaya Glinka 2, approximately 1,826 square meters were razed, resulting in a net increase of 3,604 square meters of usable floorspace. New buildings constructed during this period consisted of a shop building (item 66), a greenhouse (item 59), three storage buildings (items 62, 65, and 70), and six support buildings (unnumbered; Table 1). Other construction activity consisted of the modification of two engine test buildings (items 33 and 44), the addition of three shop sections (items 24a, 28a, and 29a) to their respective buildings, and the addition of two small annexes to a storage building (item 11). Also, six storage/utility buildings (items 1, 2, 4, 13, 22, and 27)¹ had been razed, and refurbishment of the administration/engineering building (item 30) was complete.

6. (TSR) Two cylindrical exhaust stacks were added to an engine test building (item 33) between [] [] The first stack (item 33d) is 13 meters high with a diameter of [] meters. It is connected to the engine test building by a [] diffuser tube and is [] to the south. The second stack (item 33c) is 20 meters high with a diameter of [] It is connected to the engine test building by a [] diffuser tube and is 11 meters south of the test building. A second engine test building (item 44) was also modified during this period. The modification was similar to that of the previously discussed engine test building (item 43). However, only one exhaust tower was constructed, rather than a pair of towers. The new silencer/diffuser system (item 44a) consists of a single [] exhaust tower, an exhaust port which adds 96 square meters of floorspace to the engine test building, and a [] diameter diffuser tube.

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Plant Enlargement

7. (TSR) Krasnaya Glinka 2 was enlarged on three separate occasions during the reporting period, resulting in the addition of 6.5 hectares of land area. The plant was enlarged between [] [] when the partially fence-secured northern plant area was secured by a wall (Figure 2). The second time was between [] [] when a fence was constructed to secure the new water filtration building (item 61). The third time was between [] [] when a wall and fence were built to secure the new underpass which had been created when the new administration building (item 63) was constructed. The fence in the west-central plant area was then replaced by a wall which was built approximately 15 meters west of the old fenceline.

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8. (TSR) As of [] Krasnaya Glinka 2 consisted of 70 significant buildings and structures (three under construction) with a total usable floorspace of 152,063 square meters. Completion of the three buildings (items 56, 60, and 69) presently under construction will result in approximately 1,664 additional square meters of floorspace, for a total of 153,727 square meters at the plant. A second exhaust tower (item 44b) was also under construction on that date. This tower is 5 percent larger than the one constructed at the engine test building.

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Table 1.
New Structures at Kuybyshev Experimental Aircraft and Rocket
Engine Plant Krastaya Glinka 2 Since
(Items keyed to Figure 2)

Item*	Description	Dimensions**			Total Floorpace (sq m)	Date First Observed Used	Date Completed Complete	Remarks
		L (m)	W (m)	H (m)				
1	Star/utility bldg						Razed	
2	Star/utility bldg						Razed	
4	Star/utility bldg						Razed	
11	Star bldg						Total bldg floorpace increased to 489 sq m	
13	Star/utility bldg (2 small annexes)						Razed	
22	Star/utility bldg						Razed	
24	Star/utility bldg						Razed	
a	Shop sec						Razed	
26	Shop bldg						Razed	
27	Star/utility bldg						Razed	
28	Shop bldg							
a	Shop sec							
29	Shop bldg							Connects bldgs 28 & 29
a	Shop sec							4 stories
5	Admin/verge sec							New section added and existing section refurbished; bldg has 4 stories & total floorpace of 7,100 sq m
30	Admin/verge bldg							4 stories
a	New addition							
33	Engine test bldg							Connected to bldg by a dual diffuser tube
a	Cylindrical exhaust stack							17 meters south of bldg
d	Cylindrical exhaust stack							Connected to bldg 33 by a dual diffuser tube, north of bldg
43	Engine test bldg							Consists of exhaust port, diffuser tube & 2 exhaust towers
a	Exhaust silencer/ diffuser system							Connected to exhaust port by a 5-m-diam diffuser tube
	Exhaust towers (2)							Attached to bldg
b	Exhaust silencer/ diffuser system							Consists of exhaust port, diffuser tube & 2 exhaust towers
	Exhaust towers (2)							Connected to exhaust port by a 5-m-diam diffuser tube
44	Engine test bldg							Attached to bldg 43
a	Exhaust silencer/ diffuser system							Consists of exhaust port, diffuser tube & 2 exhaust towers
	Exhaust tower							Connected to exhaust port by dual diffuser tube
	Exhaust port							Attached to bldg 44
b	Exhaust tower							Used, footings only
56	Bldg							3 story
57	Star bldg							Height could not be determined
58	Star bldg							Early stage of construction
59	Overhead							Separately from secured
60	Bldg							Pipeline connected to item 37
61	Water filtration bldg							(see ref doc 1)
a	Filtration sec							3 stories
b	Eng sec							May be attached to item 21
62	Star bldg							(see ref doc 1)
63	Admin bldg							3 stories
64	Star bldg							
65	Star bldg							Open sided
66	Shop bldg							
67	Star bldg							
68	Star bldg							
69	Bldg							Early stage of construction
70	Star bldg							
	Unnumbered bldgs (8)							Small support bldgs
Total floorpace,					141,124			
Floorpace raised					15,086			
Floorpace raised					4,317			
Total floorpace,					152,063			
Floorpace used					1,664			
Projected total floorpace					153,727			

*Item numbers after 38 represent new buildings begun after
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Production Activity

9. [] Kuybyshev Experimental Aircraft and Rocket Engine Plant Krasnaya Glinka 2 is a major Soviet aircraft engine research and development (R&D) facility. It has been identified as the location of the design bureau of N. D. Kuznetsov and as a prototype production plant for both turboprop and jet engines.¹ The large size of some of the engine test cells suggests that Krasnaya Glinka 2 may also be involved in the design of rocket engines,¹ although no photographic evidence of such activity has been obtained. Observations of aircraft engine shipping containers at the plant, the best indicator of plant activity, were rare during the reporting period. However, at least 12 NK-8 (the engine for the TU-154 CARELESS and the IL-62 CLASSIC) containers were observed on []. The NK-8 engine is produced at Kuybyshev Aircraft Engine Plant 24 [] which is 7 nautical miles south-southeast. The NK-12mv (engine for TU-95 BEAR, TU-114 CLEAT, and AN-22 COCK) and the NK-144 (engine for BACKFIRE and TU-144 CHARGER) are also produced at Plant 24.⁵ It is likely that Krasnaya Glinka 2 is involved in the testing/modification of these engines as well as of the NK-8.

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25X1**REFERENCES****IMAGERY**

(TSR) All applicable KEYHOLE imagery of suitable interpretability acquired from [] was used in the preparation of this report.

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25X1**MAPS OR CHARTS**

DMAC. US Air Target Chart, Series 200, Sheet 0165-17, scale 1:200,000 (UNCLASSIFIED)

DOCUMENTS

1. NPIC. [] RCA-09-0008/69, *Kuybyshev Experimental Aircraft Engine Plant Krasnaya Glinka 2*, Nov 68 (TOP SECRET []) 25X1
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2. NPIC. [] BCA-09-0002/70, *Kuybyshev Experimental Aircraft Engine Plant Krasnaya Glinka 2*, Aug 69 (TOP SECRET []) 25X1
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3. NPIC. [] BCA-09/0012/71, *Kuybyshev Experimental Aircraft Engine Plant Krasnaya Glinka 2*, Oct 70 (TOP SECRET []) 25X1
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4. NPIC. [] PIR-009/74, *Modified Exhaust Systems At Soviet Aircraft Engine Test Facilities*, Feb 74 (TOP SECRET []) 25X1
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5. DIA. [] DDB-1923-2A-78-SAO, *Foreign Aircraft Production Communist World (U)*, Dec 78, p 9 (TOP SECRET []) 25X1
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REQUIREMENT

COMIREX J02
Project 290046DJ

(S) Comments and queries regarding this report are welcome. They may be directed to [] Warsaw Pact Forces Division, Imagery Exploitation Group, NPIC, []

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